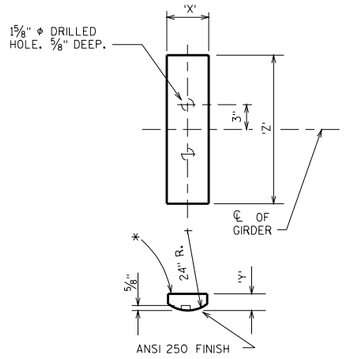
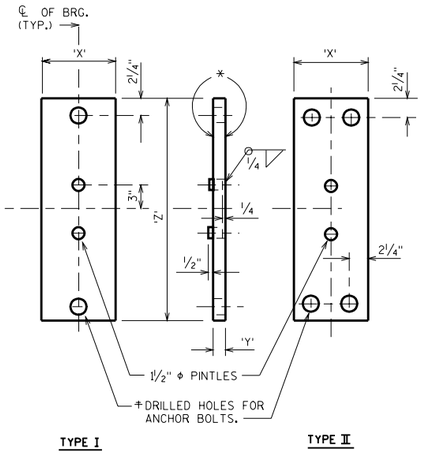
LENGTH OF PLATE "C"	CAP. KIPS	PLATE C			PLATE D			HEIGHT FEET
		X	Y	Z	X	Y	Z	
10"	150	5"	1 5/16"	10"	8"	1 1/2"	1'-7"	.2969
12"	185	5"	1 5/16"	1'-0"	9"	1 1/2"	1'-9"	.2969
	205	5"	1 5/16"	1'-0"	10"	1 3/4"	1'-9"	.3177
14"	205	5"	1 5/16"	1'-2"	9"	1 1/2"	1'-11"	.2969
	250	5"	1 5/16"	1'-2"	11"	2"	1'-11"	.3385
	295	5"	2 3/8"	1'-2"	1'-1"	2 3/8"	1'-11"	.4063
	355	5"	2 3/8"	1'-2"	1'-3"	2 7/8"	2'-0"	.4479
	405	5"	2 3/8"	1'-2"	1'-5"	2 7/8"	2'-0"	.4479
16"	195	5"	1 5/16"	1'-4"	8"	1 1/2"	2'-1"	.2969
	245	5"	1 5/16"	1'-4"	10"	1 3/4"	2'-1"	.3177
	295	5"	1 5/16"	1'-4"	1'-0"	2"	2'-1"	.3385
	360	5"	2 3/8"	1'-4"	1'-2"	2 3/8"	2'-2"	.4063
	410	5"	2 3/8"	1'-4"	1'-4"	2 7/8"	2'-2"	.4479
	455	5"	2 3/8"	1'-4"	1'-6"	3 3/8"	2'-2"	.5313
	485	5"	2 3/8"	1'-4"	1'-7"	3 7/8"	2'-2"	.5313
18"	240	5"	1 5/16"	1'-6"	9"	1 1/2"	2'-3"	.2969
	295	5"	1 5/16"	1'-6"	11"	2"	2'-3"	.3385
	360	5"	1 5/16"	1'-6"	1'-1"	2 3/8"	2'-4"	.3698
	385	5"	1 5/16"	1'-6"	1'-2"	2 3/8"	2'-4"	.3698
	445	5"	2 3/8"	1'-6"	1'-4"	2 7/8"	2'-4"	.4479
	495	5"	2 3/8"	1'-6"	1'-6"	3 7/8"	2'-4"	.5313
	550	5"	2 3/8"	1'-6"	1'-8"	3 7/8"	2'-4"	.5313
20"	255	5"	1 5/16"	1'-8"	9"	1 1/2"	2'-5"	.2969
	285	5"	1 5/16"	1'-8"	10"	1 3/4"	2'-5"	.3177
	355	5"	1 5/16"	1'-8"	1'-0"	2"	2'-6"	.3385
	415	5"	1 5/16"	1'-8"	1'-2"	2 3/8"	2'-6"	.3698
	470	5"	2 3/8"	1'-8"	1'-4"	2 7/8"	2'-6"	.4479
	530	5"	2 3/8"	1'-8"	1'-6"	3 7/8"	2'-6"	.5313
	590	5"	2 3/8"	1'-8"	1'-8"	3 7/8"	2'-6"	.5313
	620	5"	2 3/8"	1'-8"	1'-9"	3 7/8"	2'-6"	.5313
22"	305	5"	1 5/16"	1'-10"	10"	1 3/4"	2'-7"	.3177
	380	5"	1 5/16"	1'-10"	1'-0"	2"	2'-8"	.3385
	445	5"	1 5/16"	1'-10"	1'-2"	2 3/8"	2'-8"	.3698
	500	5"	1 5/16"	1'-10"	1'-4"	2 7/8"	2'-8"	.4115
	565	5"	2 3/8"	1'-10"	1'-6"	3 7/8"	2'-8"	.5313
	630	5"	2 3/8"	1'-10"	1'-8"	3 7/8"	2'-8"	.5313
	695	5"	2 3/8"	1'-10"	1'-10"	3 7/8"	2'-8"	.5313
	725	5"	2 3/8"	1'-10"	1'-11"	3 7/8"	2'-8"	.5313



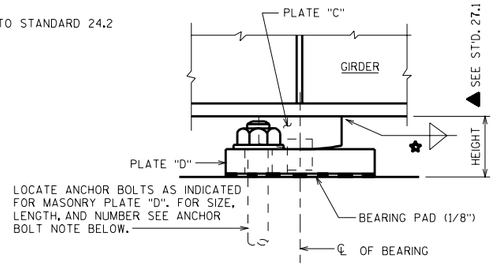
ROCKER PLATE "C"



MASONRY PLATE "D"

* FINISH THESE SURFACES ANSI 250 IF DIMENSION IS GREATER THAN 2"

✿ FOR WELD SIZE, REFER TO STANDARD 24.2



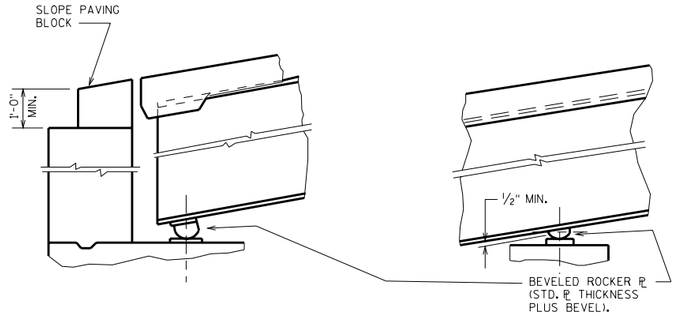
FIXED BEARING ASSEMBLY

ANCHOR BOLT NOTES

FOR SPAN LENGTHS UP TO 100'-0"; USE A TYPE I MASONRY PLATE "D" WITH (2) - 1 1/4" ϕ x 1'-5" LONG ANCHOR BOLTS.

FOR SPAN LENGTHS FROM 100'-0" UP TO 150'-0"; USE A TYPE I MASONRY PLATE "D" WITH (2) - 1 1/2" ϕ x 1'-10" LONG ANCHOR BOLTS.

FOR SPAN LENGTHS GREATER THAN 150'-0"; USE A TYPE II MASONRY PLATE "D" WITH (4) - 1 1/2" ϕ x 1'-10" LONG ANCHOR BOLTS.



AT EXPANSION BRG. AT FIXED BRG.

BEVELED ROCKERS WITH GRADES GREATER THAN 3%

BEARING NOTES

ALL BEARINGS ARE SYMMETRICAL ABOUT ℄ OF GIRDER AND ℄ OF BEARING.

FABRICATOR MAY INCREASE PLATE "D" THICKNESS AS AN ALTERNATE TO SHIMS

ALL STRUCTURAL STEEL BEARING PLATES SHALL BE FLAT ROLLED STEEL PLATES WITH ALL SURFACES SMOOTH AND FREE FROM WARP AND ALL EDGES SMOOTH, STRAIGHT AND VERTICAL.

ALL PLATE CUTS SHALL BE MACHINE OR MACHINE FLAME CUTS.

ALL FINISHED SURFACES SHALL BE MACHINE FINISHED BY AN AUTOMATIC PROCESS.

ANCHOR BOLTS SHALL BE THREADED 3". PROVIDE ONE STANDARD WROUGHT WASHER AND ONE HEX NUT PER BOLT. PROJECT ANCHOR BOLTS "D" PLATE THICKNESS + 2 1/4" ABOVE TOP OF CONCRETE.

ALL MATERIAL INCLUDING SHIMS, BUT EXCLUDING PINTLES, ANCHOR BOLTS, NUTS & WASHERS SHALL CONFORM TO ASTM A709 GRADE 50W.

STEEL PINTLES SHALL CONFORM TO ASTM A449 OR MATERIAL OF EQUIVALENT YIELD STRENGTH AND ELONGATION.

ALL MATERIALS IN TYPE "A" BEARINGS, INCLUDING SHIMS, SHALL BE PAID FOR AT THE UNIT PRICE BID FOR EITHER "BEARING ASSEMBLIES EXPANSION B-_-_" OR "BEARING ASSEMBLIES FIXED B-_-_".

CHAMFER TOP OF PINTLES 1/8". DRILL HOLES FOR PINTLES IN ALL MASONRY PLATES FOR DRIVING FIT.

PROVIDE 1/8" THICK BEARING PAD SAME SIZE AS MASONRY PLATE "D" FOR EACH BEARING.

HEIGHT OF BEARINGS GIVEN IN TABLES INCLUDES 1/8" BEARING PADS.

CHAMFER ANCHOR BOLTS PRIOR TO THREADING.

+ DRILLED HOLES FOR ANCHOR BOLTS IN MASONRY PLATE "D" SHALL HAVE A DIAMETER 3/8" LARGER THAN ANCHOR BOLT.

ALL ANCHOR BOLTS, NUTS AND WASHERS SHALL CONFORM TO ASTM A709 GRADE 36, OR MATERIAL OF EQUIVALENT YIELD STRENGTH AND ELONGATION.

ANCHOR BOLTS, NUTS AND WASHERS SHALL BE GALVANIZED AS REQUIRED BY ASTM DESIGNATION A153, CLASS "C".

PLATE "C" SHALL BE SHOP PAINTED WITH A WELDABLE PRIMER.

PLATE "D" SHALL BE GALVANIZED.

DESIGNER NOTES

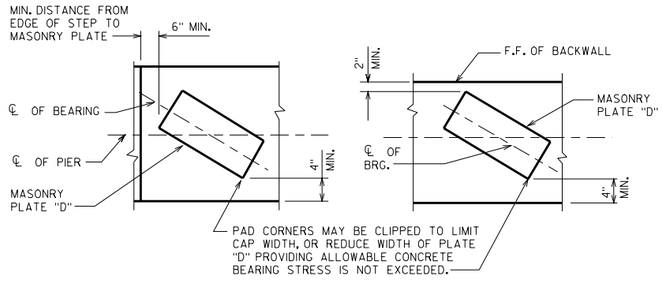
THE BEARING NOTES PERTAIN TO BOTH EXPANSION AND FIXED BEARINGS.

REFER TO DETAIL FOR THE USE OF BEVELED ROCKERS FOR GRADES GREATER THAN 3%.

DESIGN DATA

CONCRETE MASONRY = 1 KIP PER SQ. IN.

MAXIMUM HORIZONTAL FORCE = 70 KIPS



AT SKEWED PIER AT SKEWED ABUTMENTS

CLEARANCE DIAGRAM

FIXED BEARING DETAILS TYPE "A"-STEEL GIRDERS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DEVELOPMENT SECTION

APPROVED: _____ DATE: 1-05

STANDARD 27.2